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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|----------------------|----------------------|------------------|
| 10/788,694 | 02/27/2004 | Joseph A. Zupanick | 067083.0288 6999 | |
| 26231 75 | 590 04/21/2006 | | EXAM | INER |
| FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | STEPHENSON, DANIEL P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3672 | |

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|--|---|---|--|--|--|
| | 10/788,694 | ZUPANICK, JOSEPH A. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Daniel P. Stephenson | 3672 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE | . nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| Responsive to communication(s) filed on <u>03 F</u> This action is FINAL . 2b) ☐ This Since this application is in condition for allowal closed in accordance with the practice under the practice. | s action is non-final. ince except for formal matters, pro | | | | |
| Disposition of Claims | | • | | | |
| 4) Claim(s) 1-7,9-18 and 20-27 is/are pending in 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-3,9-14,20-24 and 27 is/are rejected 7) Claim(s) 4-7,15-18,25 and 26 is/are objected 8) Claim(s) are subject to restriction and/o Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on 27 February 2004 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. | e drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 2/3/06. | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2, 9-11, 22-24 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by the WIPO document '455 to Zupanick et al. (hereafter WIPO '455). WIPO '455 (figures 5 and 7A) discloses a system for accessing a subterranean zone from an entry well. It has an entry well (210) extending from the surface, the entry well having a substantially vertical portion. There are one or more drainage wells (230) extending from the entry well to a subterranean zone. Each drainage well has at least one slanted portion. There are one or more articulated wells (225, 235) extending from the entry well to the subterranean zone. The articulated well intersects the drainage well at a junction (250) proximate the subterranean zone. There is a drainage pattern (50) formed through the articulated well that is coupled to the junction and operable to conduct fluid from the subterranean zone to the junction. There is an enlarged cavity formed in each drainage well proximate the subterranean zone. According to figure 5, there are two or three drainage and articulated wells radially spaced approximately equally around the entry well. Each articulate well intersects a disparate drainage well. The drainage pattern comprises a main well bore and a plurality of lateral well bores extending from the main well bore. The lateral wells are configured to drain an area of the subterranean zone of at least 640 acres.

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3. Claims 1, 11, 23 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by the pre-grant publication '719 to Morgan et al. Morgan et al. '719 (figure 4) discloses a system for accessing a subterranean zone from an entry well. It has an entry well (16) extending from the surface, the entry well having a substantially vertical portion. There are one or more drainage wells (34) extending from the entry well to a subterranean zone. Each drainage well has at least one slanted portion. There are one or more articulated wells (32) extending from the entry well to the subterranean zone. The articulated well intersects the drainage well at a junction proximate the subterranean zone. There is a drainage pattern formed through the articulated well coupled to the junction and operable to conduct fluid from the subterranean zone to the junction. Each articulate well intersects a disparate drainage well.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 12, 13, 20 and 21 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO '455. WIPO '455 shows all the limitations of the present invention, except, it does not explicitly disclose that there is an inlet of a downhole pumping unit residing in the junction in the same embodiment as used above. In other embodiments within the document it does disclose the use of a downhole pump (80) residing within a junction to pump away fluid. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the embodiments within WIPO '455. This would be done because it is common

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knowledge within the wellbore art to use a downhole pumping unit at a drainage sight to remove fluid.

- 6. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO '455 in view of Ohmer. WIPO '455 shows all the limitations of the claimed invention, except it does not disclose that the articulated or drainage wells are formed through the use of a guide tube bundle. Ohmer (figures 6A-6E) discloses using a guide tube when forming multilateral wellbores. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bundles of Ohmer with the system and method of WIPO '455. This would be done to provide guidance for the drill.
- 7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al. '719 in view of Ohmer. Morgan et al. '719 shows all the limitations of the claimed invention, except it does not disclose that the articulated or drainage wells are formed through the use of a guide tube bundle. Ohmer (figures 6A-6E) discloses using a guide tube when forming multilateral wellbores. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bundles of Ohmer with the system and method of Morgan et al. '719. This would be done to provide guidance for the drill.
- 8. Claims 2, 9, 10, 12, 13, 20-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al. '719 in view of WIPO '455. Morgan et al. '719 shows all the limitations of the claimed invention, except it does not disclose that there is an enlarged cavity formed in each drainage well proximate the subterranean zone. Nor does it disclose that there are two or three drainage and articulated wells radially spaced approximately equally around the entry well. Nor does it disclose that the lateral wells are configured to drain an area of the

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subterranean zone of at least 640 acres. Nor does it disclose that there is a downhole pump proximate the junction between the articulated well and the drainage well. WIPO '719 discloses discloses a system for accessing a subterranean zone from an entry well. It has an entry well (210) extending from the surface, the entry well having a substantially vertical portion. There are one or more drainage wells (230) extending from the entry well to a subterranean zone. Each drainage well has at least one slanted portion. There are one or more articulated wells (225, 235) extending from the entry well to the subterranean zone. The articulated well intersects the drainage well at a junction (250) proximate the subterranean zone. There is a drainage pattern coupled to the junction and operable to conduct fluid from the subterranean zone to the junction. There is an enlarged cavity formed in each drainage well proximate the subterranean zone. According to figure 5, there are two or three drainage and articulated wells radially spaced approximately equally around the entry well. Each articulate well intersects a disparate drainage well. The drainage pattern comprises a main well bore and a plurality of lateral well bores extending from the main well bore. The lateral wells are configured to drain an area of the subterranean zone of at least 640 acres. This is performed through the use of a downhole pump (80) located at the junction. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the patterns of WIPO '455 with the apparatus of Morgan et al. '719. This would be done to allow for a high volume of production through fewer well sites.

Allowable Subject Matter

9. Claims 4-7, 15-18, 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed 2/3/06 have been fully considered but they are not persuasive.

It is the assertion of the applicant that the WIPO'455 document and the Morgan et al. document do not disclose forming a drainage pattern through the articulated well, where the drainage pattern is coupled to the junction and operable to conduct fluid from the subterranean zone to the junction. The examiner respectfully traverses this argument. Both references form extended articulated wells past a junction point and these extended wells (50 in WIPO '455 and 32 in Morgan et al.) function as a drainage pattern that is connected to the junction to conduct fluid from the subterranean zone.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Supervisory Patent Examiner
Art Unit 3672

DPS